



INFORMATION TECHNOLOGY PROJECT PROGRESS REPORT

AS OF MARCH 31, 2019

Auditor of Public Accounts
Martha S. Mavredes, CPA

www.apa.virginia.gov

(804) 225-3350



REPORT SUMMARY

This report reflects our on-going review of nine different Commonwealth information technology systems development projects with a total combined budget of \$190 million. Our review goal is to detect problems at the earliest possible point and alert decision makers of this information, thereby reducing potential project failures. We have chosen to highlight the Department of Medical Assistance Services' Medicaid Enterprise System Program and the Department of Accounts' Human Capital Management Systems Project in this report due to their size and complexity, which inherently increases the risk of delay or failure.

The Medicaid Enterprise System Program is comprised of several projects managed individually, which will be integrated to create the enterprise system. The program steering committee is comprised of each project manager from the individual projects along with other program stakeholders. The Human Capital Management Systems Project, previously known as the Cardinal Payroll Project, is a single project and is not part of a program.

For the highlighted program and project, agency management has been operating transparently to keep stakeholders aware of all associated risks. The program and project teams continue to inform us of decisions that affect these projects, invite us to attend project team meetings, and properly report the project's status to the Virginia Information Technologies Agency.

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HIGHLIGHTS OF SELECTED SYSTEMS DEVELOPMENT PROJECTS

Medicaid Enterprise System Program

Department of Medical Assistance Services (DMAS)

To continue to receive the 90-10 funding from the Centers for Medicare and Medicaid Services (Center), DMAS must modernize and replace its existing legacy Virginia Medicaid Management Information System (VAMMIS) with a more modular and technologically-advanced solution that adheres to the Center's Medicaid Information Technology Architecture 3.0 Framework. The size and complexity of this undertaking created the need for DMAS to create a Medicaid Enterprise System (MES) Program that would be comprised of multiple projects, each implementing different modules and functions of the MES.

As each project falls under the MES program and will all need to interact with one another, it is critical that the various project managers are adequately managing their individual project and effectively communicating any delays or issues to the other project managers within the program. The program manager is responsible for the overall health of the MES program and is responsible for ensuring communication between the various projects are ongoing. The program manager organizes a monthly steering committee meeting, where a status update is provided for each project to the program steering committee.

The MES program began in 2016 and is currently on track to finish in June of 2020. A few projects within the MES program have already been completed; however, most projects are ongoing as of March 2019 and will be implemented by December of 2019. There have been a few delays with various projects, which have resulted in delays to the overall program completion. Contractual delays and lack of personnel resources have been the main contributor to delays; however, they have been mostly minor and the program has not hit any major roadblocks since inception.

The four projects highlighted in Appendix A of this report are in our opinion the largest and most critical projects in the MES program. Additional detail related to those specific projects can be seen in the Appendix. The program and project teams have continued to monitor, evaluate, and respond to risks to ensure the program continues to progress with the planned schedule.

Human Capital Management Systems Project

Department of Accounts

In August 2016, the Department of Accounts (Accounts) launched the Cardinal Payroll Project to replace the Commonwealth's Integrated Personnel and Payroll System (CIPPS). The Commonwealth implemented CIPPS in 1986, and currently 200 state agencies use the system for payroll and/or leave tracking purposes. Accounts originally scheduled the completion of the Cardinal Payroll project during 2018 to coincide with the time sensitive availability of vendor software support for CIPPS. However, due to unexpected system modifications and delayed data configurations from statewide systems that support the payroll process, Accounts encountered project delays and scope expansions.

In May 2018, Accounts made the decision to immediately halt the original Cardinal Payroll Project and proceed with a more comprehensive Human Capital Management Project to include not only replacing the statewide payroll system, but also replacing the Commonwealth's human resources (PMIS), time attendance and leave (TAL), and benefits administration (BES) systems. In order to do this, Accounts secured continued vendor software support of CIPPS through the end of 2020. The Human Capital Management Project scope will integrate with the Commonwealth's accounting and financial reporting system, will reduce risks by modernizing several aging statewide systems, and will meet the majority of the Commonwealth's payroll and human resource requirements. Further, by integrating with the accounting and financial reporting system, the Commonwealth will have a variety of new reporting capabilities and more streamlined processes.

Since May 2018, Accounts has been working through an analysis phase to determine the Human Capital Management Project's new timeline, budget, and scope. Due to the expansion in scope, Accounts has partnered with the Department of Human Resource Management (Human Resources) to ensure the new systems' specifications are accurate and capture the Commonwealth's standards. This partnership between Accounts and Human Resources is paramount to the success of the Human Capital Management Systems Project.

As of March 2019, Accounts is two months from completing the analysis phase and presenting the new timeline, budget, and scope to the steering committee for approval. Of the \$43 million original budget, \$37 million has been spent as of March 31, 2019. This cost includes expenditures from the Cardinal Payroll Project and analysis phase of the Human Capital Management System Project. Additional budget will be secured after the analysis phase to complete the implementation of the Human Capital Management Systems Project.

OVERVIEW OF OUR REVIEW PROCEDURES

Objectives and Scope

The Auditor of Public Accounts (APA) follows a number of information technology (IT) development projects across the Commonwealth, and Appendix A has our ongoing summary of these projects. Our objectives in following these projects are to determine if:

- the project manager complies with the Commonwealth's Project Management Standards, as issued by the Virginia Information Technologies Agency (VITA); and
- the project remains on time, within budget, and on scope.

Methodology

We continuously monitor various resources when identifying potential systems development projects, including legislative meetings, the Appropriation Act and Budget Bill, agency management and systems professionals, VITA's Project Management Division, and other sources. Once we identify a potential systems development project, we maintain a record of that system as it progresses through its development lifecycle.

The volume of ongoing projects dictates that we identify and follow only those that represent the most risk to the Commonwealth. To determine which projects to follow, we create a list of all potential projects from the sources listed above and meet to discuss each project. During that discussion, we consider things like project cost and complexity, the agency's success with similar projects, the project team's experience, and the underlying technology.

Our reviews generally include examining documents such as the project charter, project planning documents, and risk mitigation strategies. We regularly attend project meetings to note any issues affecting the project and meet with project managers to offer suggestions and recommendations based on our experience monitoring system implementations throughout the Commonwealth.

Our goal is to detect problems at the earliest possible point and alert decision makers to this information, thereby reducing project failures as well as costs. During our review process, we also gain an understanding of the system and its controls that will allow us to plan future audit work involving the system.

Effective July 1, 2009, § 2.2-1509.3 of the Code of Virginia began requiring the Budget Bill to include appropriations for major information technology projects. In 2015, that requirement was modified by Acts of Appropriation, Chapter 665, Item 424 D.2. whereby VITA's Quarterly IT Project Status Report (Quarterly Report) would be used to satisfy the Code of Virginia requirements. As part of our regular review process, we reconcile projects in the Quarterly Report to information we have collected regarding current and anticipated projects. If we identify discrepancies, such as projects not in the

Quarterly Report but on our list of anticipated projects, we inquire with VITA and the proponent agency to identify why the discrepancy exists.

Results

During the year, we report the results of our project reviews in different ways, depending on the circumstances. Often, we include project background and status information within the annual audit report of the agency. However, if there is a legislative request that we review a system, we will prepare a written report specifically addressing that request. Finally, if we identify serious project management concerns, which the agency has not resolved in a timely manner, we immediately notify the agency head and consider issuing a report detailing the concerns and our recommended corrective action.

The purpose of this report is to provide a progress report of the projects we are currently following and any recommendations we have to improve project management practices. Appendix A contains a background and history of all the projects we are currently following. All agencies with a project included in this report have verified the accuracy of information included in this report. However, since there were no new findings presented in this report, we did not conduct a formal exit conference or receive an agency response. The reader can find previously released reports by searching a specific agency name on the Auditor of Public Accounts' website at www.apa.virginia.gov.

COMPREHENSIVE LIST OF SYSTEMS DEVELOPMENT PROJECTS CURRENTLY UNDER REVIEW

The systems development projects listed below are those projects we are actively monitoring. While this list is not inclusive of all current projects across the Commonwealth, it does represent those projects that we consider of the highest importance due to risk, budget, and/or impact of the system. We discuss emerging project issues within a project's grid and summary below.

Table 1

Agency	System Name	System Budget	Page
Accounts	Human Capital Management Systems	\$ 43,000,000	6
Alcoholic Beverage Control	Financial System Replacement	11,800,000	7
Alcoholic Beverage Control	Licensing System Replacement	8,745,000	8
Board of Accountancy	Licensing System	866,397	9
Medical Assistance Services	MES Data Warehouse	27,572,361	10
Medical Assistance Services	MES Encounter Processing	9,489,000	11
Medical Assistance Services	MES Operations Services / Plan Management	62,153,173	12
Medical Assistance Services	MES Integration	22,321,464	13
Transportation	CEDAR Upgrade	3,745,000	14
Total Budget		\$189,692,395	

Human Capital Management Systems*Accounts*

Table 2

<p>The Cardinal team launched the Cardinal Payroll project in August 2016, which will result in the replacement of the Commonwealth's Integrated Personnel and Payroll System (CIPPS). The Commonwealth implemented CIPPS in 1986 which is now outdated. Currently 200 state agencies use the system for payroll and/or leave tracking purposes. The initial Cardinal Payroll implementation timeline was based on an end of CIPPS service date being May 1, 2018. Due to unexpected system modifications and delayed data cleansing/configurations from the Personnel Management Information System (PMIS), the project was placed on hold in May 2018.</p> <p>Shortly after being placed on hold, Accounts and Human Resources decided to expand the scope of the project to include the replacement of PMIS, the Time Attendance and Leave System (TAL), and Benefits Eligibility System (BES). These systems were internally developed by Human Resources and were next to be replaced after the completion of the CIPPS project. In order to complete the newly expanded project, CIPPS support has been extended through December 2020. As of March 2019, the project team has almost completed their analysis phase for the newly expanded scope. The analysis phase will last approximately ten months and will allow the project team to determine the new timeline, budget, and system requirements. The details of the analysis phase will be presented in May 2019.</p>	
Project Sponsor	David Von Moll, State Comptroller Randy McCabe, Deputy State Comptroller
Project Manager	Edmond O'Neill and Stacy McCracken
Current Phase of Development	Initiation
Project Timeline	<ul style="list-style-type: none"> • HCM As-Is Analysis September 2018 • HCM Technology Roadmap.....January 2019 • HCM To-Be Analysis.....February 2019 • HCM RequirementsMarch 2019 • HCM Implementation Estimate.....March 2019
Total Budget	\$43,000,000 (will be amended in June 2019 for scope change)
Funding	Working capital advance to be repaid with Internal Service fees
Actual Costs as of March 31, 2019	Cardinal Payroll - \$32,922,013 Cardinal HCM Analysis - \$4,147,790
Outside Contractor(s)	<ul style="list-style-type: none"> • Integration Services: Accenture • Software: Oracle • IV&V: Impact Makers, Inc.
Additional Information	Also, the section above entitled "Highlights of Selected Systems Development Projects" contains additional information on this project.
Prior APA Report and Issue Date	Secretary of Finance Report on Audit dated January 28, 2019 http://www.apa.virginia.gov/reports/SecretaryofFinance2018.pdf

Financial System Replacement
Alcoholic Beverage Control

Table 3

<p>The Virginia Alcoholic Beverage Control Authority (ABC) is replacing its legacy financial management system, known as Performance, with a cloud-based hosted solution. Performance processes and maintains ABC's financial accounting and fiscal functions; and is approximately 20 years old and operates on an unsupported technology. ABC selected Accenture as its implementation partner and, as of March 2019, the project is in the execution phase with plans to go-live on July 1, 2019.</p>	
Project Sponsor	Secretary of Public Safety and Homeland Security
Project Manager	Lisa DeLuke
Current Phase of Development	Execution and Control
Project Timeline	<ul style="list-style-type: none"> • Budget Integration TestJanuary 2018 • Project Iteration 1 and 2December 2018 • Budget User Acceptance Test.....January 2019 • Finance Iteration 1 and 2.....February 2019 • Finance Integration Test.....April 2019 • Finance User Acceptance Test.....May 2019 • Finance Deploy.....June 2019
Total Budget	\$11,800,000
Funding	Non-General Funds
Actual Costs as of March 31, 2019	\$5,197,650
Outside Contractor(s)	Accenture is the implementation partner. Garter assisted with system requirements.
Prior APA Report and Issue Date	<p>Progress Report on Selected System Development Projects in the Commonwealth - March 30, 2018</p> <p>http://www.apa.virginia.gov/reports/InternetTechnologySystemDevelopmentProjectsProgress2017.pdf</p>

Licensing System Replacement
Alcoholic Beverage Control

Table 4

<p>ABC's Licensing and Compliance System will replace several legacy systems with a modern means to store and maintain all information related to ABC licensee applications, records and compliance. ABC originally planned to start the project in 2013, but began the planning phase in 2018. The delays occurred because ABC decided to cancel and re-issue a Request for Proposal (RFP) upon learning that the Virginia Information Technologies Agency would allow them to open the procurement to Software as a Service (SAAS) vendors. ABC awarded the contract to Accela Inc., a government software solutions company who has extensive experience working with government agencies in providing licensing-type software.</p>	
Project Sponsor	Frank Monahan
Project Manager	Reginald Hawkins (as of 3/1/2019)
Current Phase of Development	Execution and Control
Project Timeline	<ul style="list-style-type: none"> • Project Kick-offJanuary 2018 • Project Initiation and PlanningMarch 2018 • Detail Planning and Requirements Design.....June 2019 • BuildSeptember 2019 • Project Close-OutFebruary 2020
Total Budget	\$8,745,000
Funding	Non-General Funds
Actual Costs as of March 31, 2019	\$3,677,959
Outside Contractor(s)	Accela Inc.
Prior APA Report and Issue Date	<p>Progress Report on Selected System Development Projects in the Commonwealth - March 30, 2018</p> <p>http://www.apa.virginia.gov/reports/InternetTechnologySystemsDevelopmentProjectsProgress2017.pdf</p>

Licensing System
Board of Accountancy

Table 5

<p>The Virginia Board of Accountancy (VBOA) plans to replace its current licensing system/database. VBOA determined that a third-party hosted solution was most suitable for this project and selected MicroPact, Inc. as the vendor who will provide the solution. MicroPact, Inc. will work with the current system vendor, System Automation, to integrate the legacy data into the new system.</p> <p>This project is currently suspended due to risk and vendor turnover. Legacy data conversion has been the most significant risk identified throughout this project and the vendor, MicroPact, Inc., was acquired by Tyler Technologies in February 2019. VBOA requested this project suspension in March 2019 to allow for time to meet with the Board of Directors to determine if the contracted solution will meet agency needs.</p> <p>The project was originally scheduled to be completed in November 2018. A change request was issued and approved in June 2018, which moved the planned completion date to September 2019. This change request resulted from delays in contract negotiations and securing access to the legacy database. If the project is reinstated, it should not be expected to be completed until early 2020, at the earliest.</p>	
Project Sponsor	Nancy Glenn, Executive Director
Project Manager	Kathy Czerwonka, PMP
Current Phase of Development	Project currently suspended. At time of suspension, project was in Execution and Control phase.
Project Timeline	<ul style="list-style-type: none"> • Project Kick-offNovember 2017 • Validate Requirements and DesignJanuary 2018 • Configure, Convert Data, TestJune 2018 • Testing and User TrainingOctober 2018 • Go-LiveOctober 2019 <i>at earliest if project is reinstated</i> • Project Close-OutJanuary 2020 <i>at earliest if project is reinstated</i>
Total Budget	\$866,397
Funding	Dedicated Special Revenue
Actual Costs as of March 31, 2019	\$808,053
Outside Contractor(s)	MicroPact, Inc.

MES Data Warehouse
Medical Assistance Services

Table 6

<p>The Commonwealth of Virginia's Department of Medical Assistance Services (DMAS) is replacing its Virginia Medicaid Management Information System (VAMMIS) with a Medicaid Enterprise System (MES). The purpose of this project is to contract with a vendor who will provide an Enterprise Data Warehouse Solution (EDWS) that will provide DMAS with the ability to accomplish improved business operations through data integration, creation of data quality standards, and increased security.</p> <p>This project will require multiple phases, each releasing new capabilities. Phase one of the project is to build a data management foundation and convert historical data; phase two is to establish extract and load processes for new systems; and phase three is to develop advanced and improved data sharing capabilities. In the early stages of this project there were potential delays due to the vendor, Optum, not performing up to expectations. The DMAS project team communicated their issues to Optum timely, and all performance issues were addressed by Optum to keep the project on track.</p>	
Project Sponsor	Karen Kimsey, Chief Deputy Director
Project Manager	Umakanth Pandurangaiah
Current Phase of Development	Execution and Control
Project Timeline	<ul style="list-style-type: none"> • Project Initiation.....December 2017 • Detailed System Design.....January 2019 • Phase 1 Release.....September 2019 • Phase 2 Release.....May 2020 • Phase 3 Release.....June 2020 • Project Closeout.....July 2020
Total Budget	\$27,572,361
Funding	90 percent Federal Funds, 10 percent General Funds
Actual Costs as of March 31, 2019	\$13,399,658
Outside Contractor(s)	Optum

MES Encounter Processing
Medical Assistance Services

Table 7

<p>DMAS is proposing to develop, operate and maintain the system in-house in order to leverage the current investment in technical tools, provide an environment that will address business needs in an expedited manner, and greatly reduce operational costs. This system will build upon the new MES Electronic Data Interchange Gateway. Due to scope and budget changes, the project has been extended from September 2018 to December 2019 and the budget increased \$1,457,451.</p>	
Project Sponsor	Karen Kimsey, Chief Deputy Director
Project Manager	Christopher Crowder
Current Phase of Development	Execution and Control
Project Timeline	<ul style="list-style-type: none"> • Project Detailed Planning Approval.....September 2016 • Track 1 Design Develop and Implement.....July 2017 • Track 2 Design Develop and Implement.....January 2018 • Track 3 Design Develop and Implement.....July 2018 • Project CloseoutDecember 2019
Total Budget	\$9,489,000
Funding	90 percent Federal Funds, 10 percent General Funds
Actual Costs as of March 31, 2019	\$6,413,702

MES Operations Services / Plan Management
Medical Assistance Services

Table 8

<p>The MES Operations Services and Plan Management project addresses many of the business requirements that will comprise the MES solution, as mandated by the Centers for Medicare and Medicaid Services through the Medicaid Information Technology Architecture 3.0 Framework. This project will address the need of various business areas including Business Relationship Management, Care Management, Eligibility and Enrollment Management, Operations Management, Plan Management, and Provider Management.</p>	
Project Sponsor	Karen Kimsey, Chief Deputy Director
Project Manager	Michael Paccione
Current Phase of Development	Execution and Control
Project Timeline	<ul style="list-style-type: none"> • Project Initiation.....April 2018 • Planning PhaseMay 2018 • Design and Configuration.....March 2019 • Systems Integration Testing.....October 2019 • Conversion and User Acceptance Test.....November 2019 • Go-Live.....December 2019
Total Budget	\$62,153,173
Funding	90 percent Federal Funds, 10 percent General Funds
Actual Costs as of March 31, 2019	\$33,318,578
Outside Contractor(s)	Optum

MES Integration
Medical Assistance Services

Table 9

DMAS is proposing to procure and develop a solution for data integration across modules and provide a secure single point of access for various MES modules. This system will build upon all of the MES projects through a master integration that coordinates with MES modules.	
Project Sponsor	Karen Kimsey, Chief Deputy Director
Project Manager	Ajay Rohatgi
Current Phase of Development	Execution and Control
Project Timeline	<ul style="list-style-type: none"> • Project Detailed Planning Approval.....November 2017 • Design Develop and Implement Detailed Planning.....March 2018 • Design Develop and Implement Execution..... December 2019 • Project Close-OutMarch 2020
Total Budget	\$22,321,464
Funding	90 percent Federal Funds, 10 percent General Funds
Actual Costs as of March 31, 2019	\$8,736,106

CEDAR Upgrade
Transportation

Table 10

The CEDAR Upgrade Project at the Virginia Department of Transportation (VDOT) involves significant enhancements to the existing CEDAR application in order to better respond to regulatory mandates, align development efforts to the Commissioner's stated response to Environmental Protection Agency audit, capture benefits from automating manual tasks currently processed via CEDAR, and allow the decommissioning of departmental databases that process data not handled within CEDAR.

The CEDAR Upgrade Project will be implemented in three modules/phases including the Facilities Compliance phase, Municipal Separate Storm Sewer System and Total Maximum Daily Load phase, and Threatened and Endangered phase. VDOT's 's vendor, World View Solutions, will be implementing the upgrade with the help of VDOT stakeholders; and the project is intended to be implemented by May of 2020.

As of March 2019, VDOT is working with World View Solutions to mitigate the project risk by reviewing and refining the schedule, and reviewing possible scope increases. There have been minor release delays during implementation; however, the overall end-to-end schedule for delivery of all modules is not in jeopardy. Editing requirements will necessitate a need for a statement of work change order. The impact of the change order on the budget is still being assessed as of March 2019.

Project Sponsor	Angel Deem, Environmental Division Director
Project Manager	Kurt Robohm
Current Phase of Development	Execution and Control
Project Timeline	<ul style="list-style-type: none"> • Project Planning and ApprovalMay 2018 • Module 1 Full Implementation.....July 2018 • Module 2 Full Implementation.....May 2019 • Module 3 Full Implementation.....March 2020 • Module 4 Full Implementation.....October 2020 • Project Close-OutJuly 2020
Total Budget	\$3,745,000
Funding	84 percent Non-General Funds, 16 percent Federal Funds
Actual Costs as of March 31, 2019	\$926,657
Outside Contractor(s)	Implementer: World View Solutions



Martha S. Mavredes, CPA
Auditor of Public Accounts

Commonwealth of Virginia

Auditor of Public Accounts

P.O. Box 1295
Richmond, Virginia 23218

March 30, 2019

The Honorable Ralph S. Northam
Governor of Virginia

The Honorable Thomas K. Norment, Jr.
Chairman, Joint Legislative Audit
and Review Commission

We are currently following the systems development process for several major information technology projects and submit our report entitled, **"Progress Report on Selected System Development Projects in the Commonwealth"** for your review.

We found that for the major information technology projects included in this progress report, the project managers comply with the Commonwealth's Project Management Standard, as issued by the Virginia Information Technologies Agency or with project management best practices where exempt from the Commonwealth standard. In Appendix A, we provide a summary of each of the projects we are currently following. Further, we include additional information on the projects at the Department of Medical Assistance Services and the Department of Accounts to highlight unique aspects of their status.

This progress report does not include new recommendations for any of the projects we are currently following, but instead describes project history, activities, and status. We verified the accuracy of this information with all of the agencies; however, since there were no recommendations, we did not conduct an exit conference or receive an agency response.

AUDITOR OF PUBLIC ACCOUNTS

KJS/vks